DAKOTA ZEPHYR

AUGUST, 1935 VOL 1 NUMBER 3

Price ..... 10¢

PROJECT No 33, HURON, S. DAK.

PROGRESS OF THE SOIL CONSERVATION PROGRAM

It has been announced by Mr. H. H. Bennett, Chief of the Bureau of Soil Conservation, United States Department of Agriculture, Washington, D. C., that three new project areas have been approved by the Secretary of Agriculture in this district. These three new projects are located as follows: One near Great Falls, Montana, one near Grafton, North Dakota, and the third near Winner, South Dakota.

The Montana project is known as the Power-Dutton area and consists of 32,000 acres. Great Falls will be the project headquarters. This project comprises two areas separated by a strip of grazing land several miles in width. The limited amount of contracted acreage is 25,000 acres.

The North Dakota project with project headquarters at Grafton, N. Dak., is known as the South Branch Park River area. This project, situated in the watershed area of the South Branch of the Park River, has an extent of 51,320 acres with a limited contracted acreage of 25,000 acres. Within the area, a C. C. C. Camp is now operating, water conservation being the major activity.

The third project, located in Tripp County, S. Dak., is on the watershed of Willow Creek and is known as the Willow Creek area. The extent of this area is 49,900 acres with a contracted acreage limit of 25,000.

All three of these projects are for the demonstration of wind erosion control practices. Project activities will be started as soon as equipment and technical personnel can be made available. Labor on these projects will be taken from the relief rolls. Certification of eligibles will be obtained from the United States Employment Service, through cooperation with the various W. P. A. offices. In accordance with the President's plan, the Security Wage Rate will prevail.

Additional new projects will have to be requested by the Soil Conservation Associations and the applications for such projects sent to the State Coordinator, Huron, S. Dak. If these project applications are approved by the State Coordinator and his committee, consisting of the State Extension Director and Director of Experiment Stations, they are then transmitted to Washington through the Regional Conservator for final action.

It is important that Soil Conservation Associations be organized and encouraged. The personnel of the Soil Conservation Service will be glad to assist in the organization of such associations and to cooperate with county agents wherever cooperation is desired.

H. J. Clemmer,
Regional Director.

THE DAKOTA ZEPHYR

Published Monthly
For the Benefit of Soil Conservation Cooperators
By the Staff of Soil Conservation Project No. 33
United States Department of Agriculture
Huron, South Dakota
H. J. Clemmer, Regional Director

Editor: J. G. Hutton Contributors: Members of the Staff

Volume 1. August, 1935 No. 3

Greetings, Cooperators and Friends! Your August "Zephyr" has arrived. It brings "Good News", too. You are asked to preserve this number with the others as we have tried to include material which will be of value to you.

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Soil erosion control can be accomplished only by an efficient system of farming. Such a system includes not only soil management but farm management, that is, careful planning as to the production of crops at the lowest practicable cost as well as the utilization and sale of these same crops.

----O----

There is a large amount of land in the United States which would be habitable if there were a good supply of water available for use in farm homes and for livestock.

Here in the James River Valley, artesian water is a valuable resource and it insures an adequate supply of water for man and beast. Our water resources like our soil resources must be conserved, that is, used efficiently and without waste, if we are to make this country as prosperous as we want it to be.

It is true that periods of drought are sure to come, but as long as the artesian wells flow or can be pumped, the possibilities for permanent prosperous agriculture are great, if the soil is saved.

----O----

There is no doubt in the minds of people who have seen the results of grasshopper infestations that these insects may consume all vegetation and leave the soil bare. The unprotected soil is left exposed to erosion by wind and running water. One of the contributing agencies to the damage done by wind erosion in recent years has been the destruction of vegetation by grasshoppers.

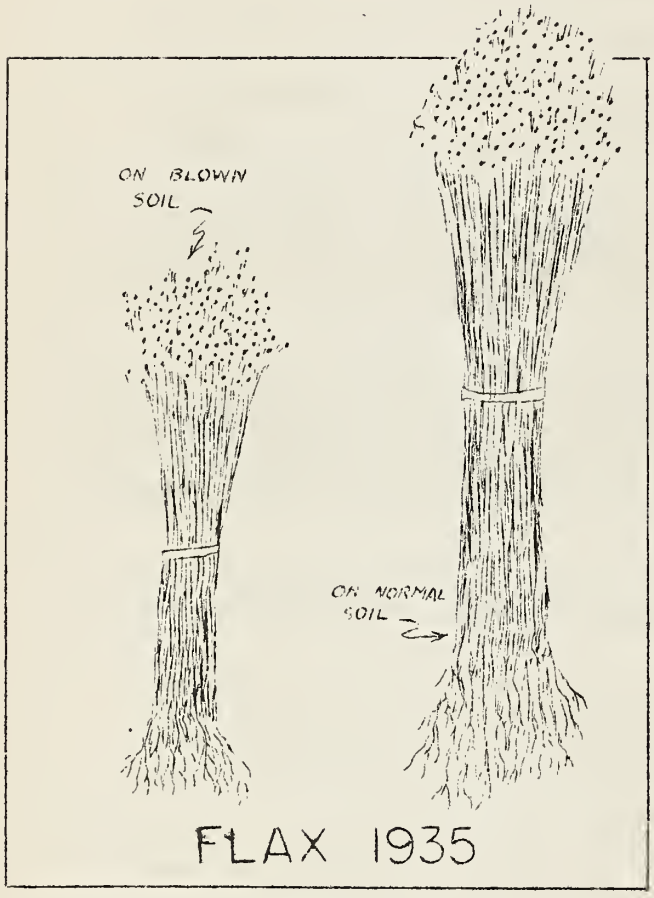
It would be comforting if we could lay all the blame for wind erosion on the hoppers, for they come only occasionally, but the fact is that the removal of vegetation by farm animals, by man himself, or by fire contributes to the same bareness of soil and that the results of such preventable causes are, in the long run, much more important than hopper damage.

Any system of farming which does not return vegetable matter to the soil and keep the land covered during hazardous seasons is doing all the time what grasshoppers at their worst do only occasionally.

JGH

ROBBERY !

WIND EROSION STEALS PLANT FOOD



Soils which have been subjected to severe wind erosion frequently show the results of the removal of the fertile top soil in decreased crop yields. The sketch of two bundles of flax shown here was traced from an actual photograph of flax grown in Beadle County. The short bundle on the left grew on a part of a field from which some of the surface soil has been removed, while the larger bundle grew where the soil has not been blown. Similar observations may be made in grain fields and corn fields.

Occasionally, good crops are reported from fields which have been eroded. There are many examples of fields which last spring appeared to the casual observer to be ruined which have produced fair crops this summer. Careful examination shows that even though the soil may have been bare last year, no notable soil removal occurred.

In the last issue of the "Zephyr", Paul Emerson, Chief Soils Specialist, called attention to the fact that the nitrogen alone in the surface six inches of soil over an acre in this area is worth $400.00 if purchased on the market as commercial fertilizer. Nitrogen is one of the essential elements of plant food and is found chiefly in the dark layer of surface soil so that when the surface soil is removed the nitrogen goes with it and the crop yield is reduced as shown in the sketch. When all surface soil is removed, there will be little or no crop.

Sweet clover has the power of taking nitrogen from the air and can be grown on blown soils. If it is plowed under, the nitrogen supply will be gradually increased and blown soils may again become productive.

In an article on another page of this issue, D. M. Hall calls attention to the amount of plant food removed from soils in the productinn of crops. In so far as the removal of crops reduces the nitrogen supply, the effect is similar to that of wind erosion. Farming can also become a system of robbery.

J. G. H.

HOW LONG A CROP ROTATION ?

The production of crops demands fertility elements in rather definite amounts. The higher the yield the greater the demand on the soil. The major plant nutrients are nitrogen, potassium, phosphorus, and calcium. If these are to be replaced in the soil they must be purchased, with the exception of nitrogen. Legume crops, as alfalfa and the clovers, have the ability to gather this nitrogen from the air and store it in a form that is available for plant use. This fact must be kept in mind in planning a crop rotation. Nitrogen is the most essential plantfood, is most expensive and most easily lost, yet most conveniently restored by proper rotations.

The nitrogen removed from the soil by crops is tabulated for yields which are about the average in the soil erosion area.

	Yield per acre	Nitrogen removed, pounds	
		Per Bushel	Per Acre
Wheat	15	2.02	30.3
Oats	30	1.04	31.2
Barley	20	1.10	22.0
Corn	30	1.48	44.4
Sweet clover	1 T.	50.0 T.	50.0

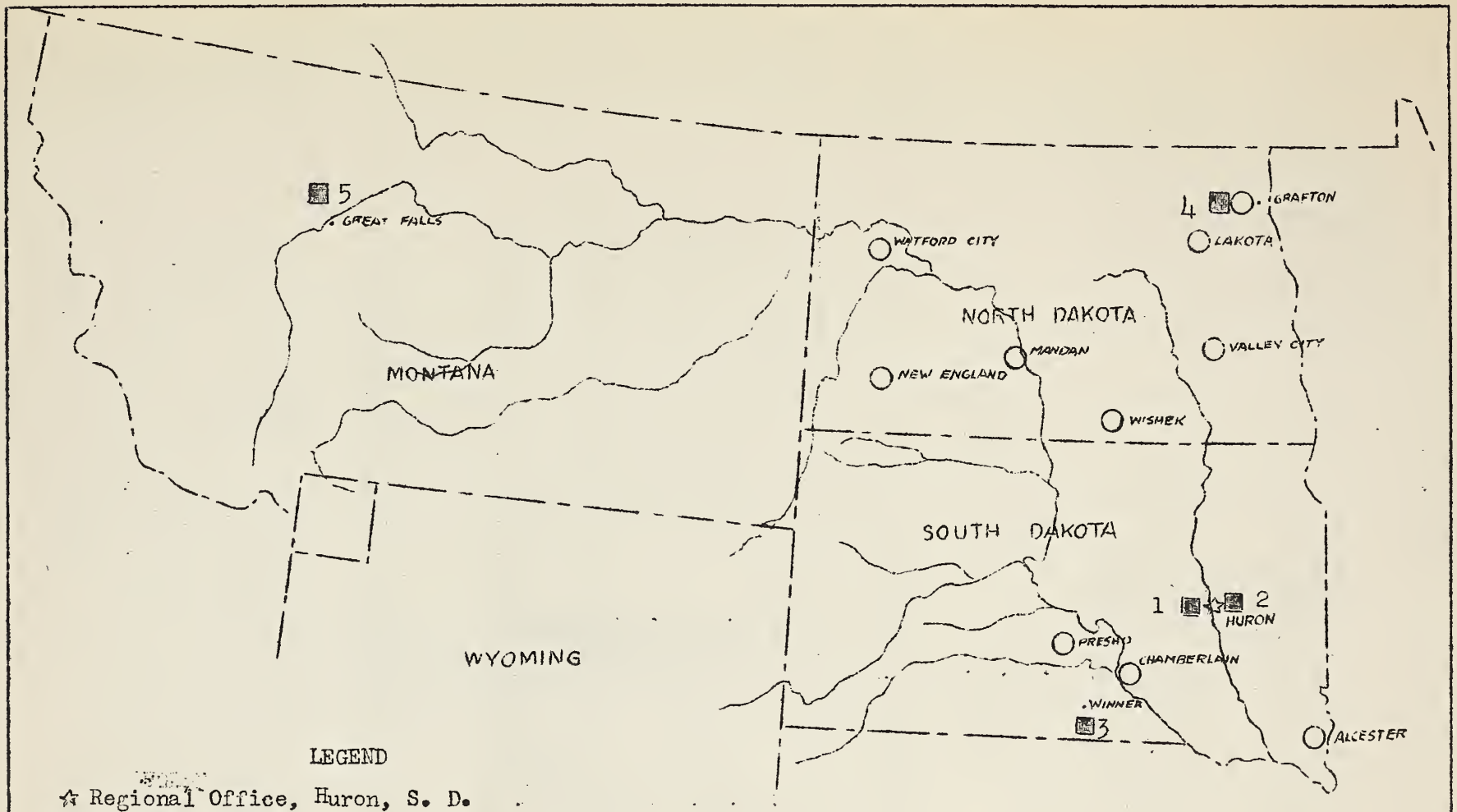
The rotations generally followed will remove the nitrogen as follows:

Corn and Wheat	74.7 lbs.
Corn and oats	75.6 "
Corn and barley	66.4 "

If these crops are placed in a 3-year rotation with sweet clover and the sweet clover will average 1½ tons of dry hay plowed under, approximately 75 lbs. of nitrogen will be returned per acre of soil. Thus with yields as low as those indicated above, the nitrogen supply will just about balance. Any longer rotation will show a loss of nitrogen.

The other plant food elements will always be lost and can only be returned through the application of commercial fertilizers. The era of extensive soil mining is over and a permanent agriculture demands soil conservation which means fertility as well as moisture and organic matter conservation.

D. M. Hall
Agronomist.



LEGEND

☆ Regional Office, Huron, S. D.
○ C. C. C. Camps.
▩ Soil Conservation Areas.

1. Wolsey.	46,000	Acres.
2. Shue Creek.	144,000	"
3. Willow Creek.	49,900	"
4. South Branch Park River	51,300	"
5. Power-Dutton.	32,000	"

SOIL AND WATER CONSERVATION
In South Dakota, North Dakota, and Montana.
Soil Conservation Service, U. S. D. A.
H. J. Clemmer, Regional Director.

SOMETHING TO THINK ABOUT

A will has been registered in Cook County, Illinois, that bequeaths:

To Children: The flowers of the fields, the blossoms of the wood, the banks of brooks, long days to be merry in with white clouds overhead.

To Youth: Pleasant waters where one may fish, swim or skate, hills to roam or coast and all useful idle fields for sport.

To Lovers: An imaginary world--the stars, the milky way, the moon, the bloom of flowers and the strains of music.

To Parents: All good little words of praise and endearments to be used justly, but generously.

To the Aged: Memory to the end that the old days may be lived over again, and the love and gratitude of those nearest and dearest until they fall asleep.

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What Will You Leave To Your Heirs?

Will you bequeath a farm that is better than when you received it?--Or, will you bequeath a worn-out, blown-out, shifting stretch of sand?

Its up to you---The Soil Conservation Service stands ready to help you to:

"Keep the Good Soil Good."
Make the poor soils better.
Make the fields bloom as they would
If we all pulldd togothor.

Paul Emerson,
Chief Soils Specialist.

HOME MADE SWEET CLOVER SEED HARVESTER

By Lee Minium - Assistant Agricultural Engineer

Kansas Extension Bulletin No. 45, "Sweet Clover in Kansas," explains how an old discarded binder may be made over into a special sweet clover harvester with very little expense.

This method of harvesting will save only about sixty per cent of the seed while other methods will save about eighty per cent according to the bulletin. However, this method is claimed to be the cheapest because it eliminates the cost of cutting, twine, shocking, threshing and disposing of the straw. Furthermore, the seed is practically all mature. The machine collects the seed from the standing clover by knocking it off with a beater. Then it is caught in the enclosed platform back of the beater.

Figure 1 shows the parts of a binder that are needed for the home made harvester with the exception of the drive chain and the counter-shaft assembly. Strip everything off the binder except the main frame, platform, drive wheel, grain wheel and tongue truck. If the old binder platform is not tight enough to hold the seed replace it with a new galvanized iron bottom. The necessary frame work which must be added to the old binder frame for holding the beater and sides for the enclosed platform is shown in Figure 2.

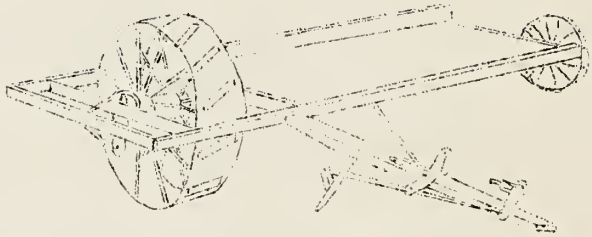


Fig. 1

Pieces A are strap irons 4 ft. 8 in. long by 2 in. wide by $\frac{1}{2}$ in. thick with holes drilled in the three front pieces for vertical adjustment of the beater.

The beater shaft is 1 1/8 in. in diameter and long enough to reach the entire length of the machine. The sprocket, clutch and spring from the counter shaft of the binder are mounted on the beater shaft. The beater is driven by this sprocket from the main drive wheel by lengthening the drive chain. The clutch is used for disengaging the beater when desired.

The frame for attaching the fine screen enclosing the platform may be made of light angle iron, see I, Fig.2. The top pieces, D, Fig.2, which runs lengthwise of the platform are 2 in. by 2 in. wood.

Figure 3 shows the completed machine with fine screen at each end of the platform and at the back and top. It also shows the galvanized door B, at the back of the platform to be used in removing the gathered seed.

The beater arms E, Fig. 3, are 5 ft. long by 3/4 in. thick by 1½ in. wide and should be made of hardwood. The beater slats, F, in Fig. 3, are oak 1 in. by 6 in., and of a length according to the width of the binder. H, Figure 3, shows the tapered oak blocks 10 in. by 2 in. by 2½ in., used to clamp the beater arms to the shaft. G, Figure 3, shows a wood 2 in. by 4 in. attached where the guards were originally. This piece helps collect the seeds from the standing clover by scraping the seed from the plant as the beater bends it back into the platform. The beater should be set so the slats will run about 12 inches above this 2 in. by 4 in. piece of wood.

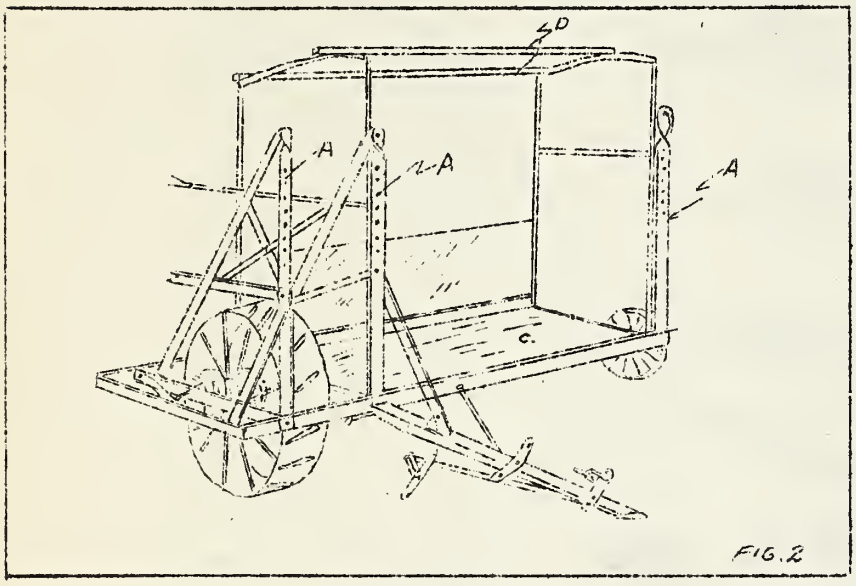


FIG. 2

There will be some green seed, leaves and other material gathered with the seed which will require spreading the seed out on a floor to dry. After it is dry, it can be run through a fanning mill and scarifier.

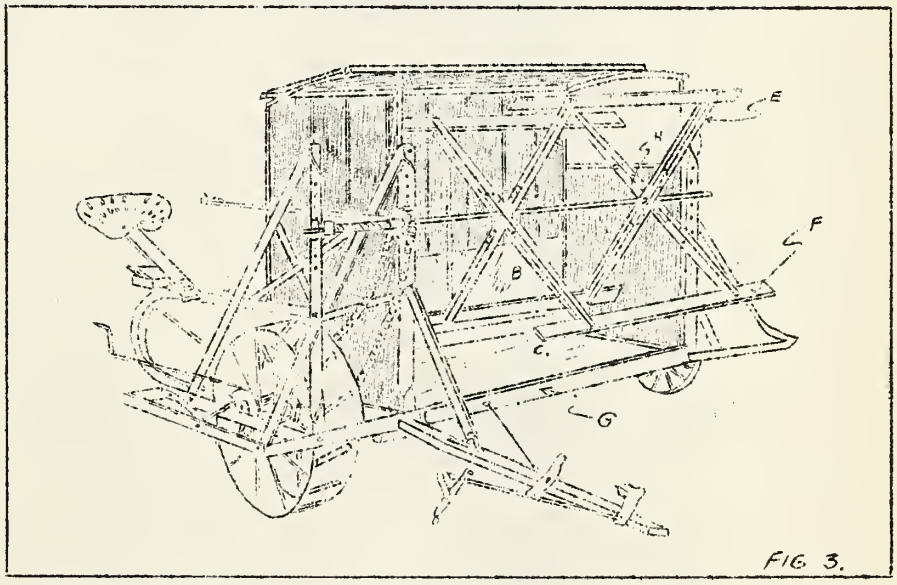
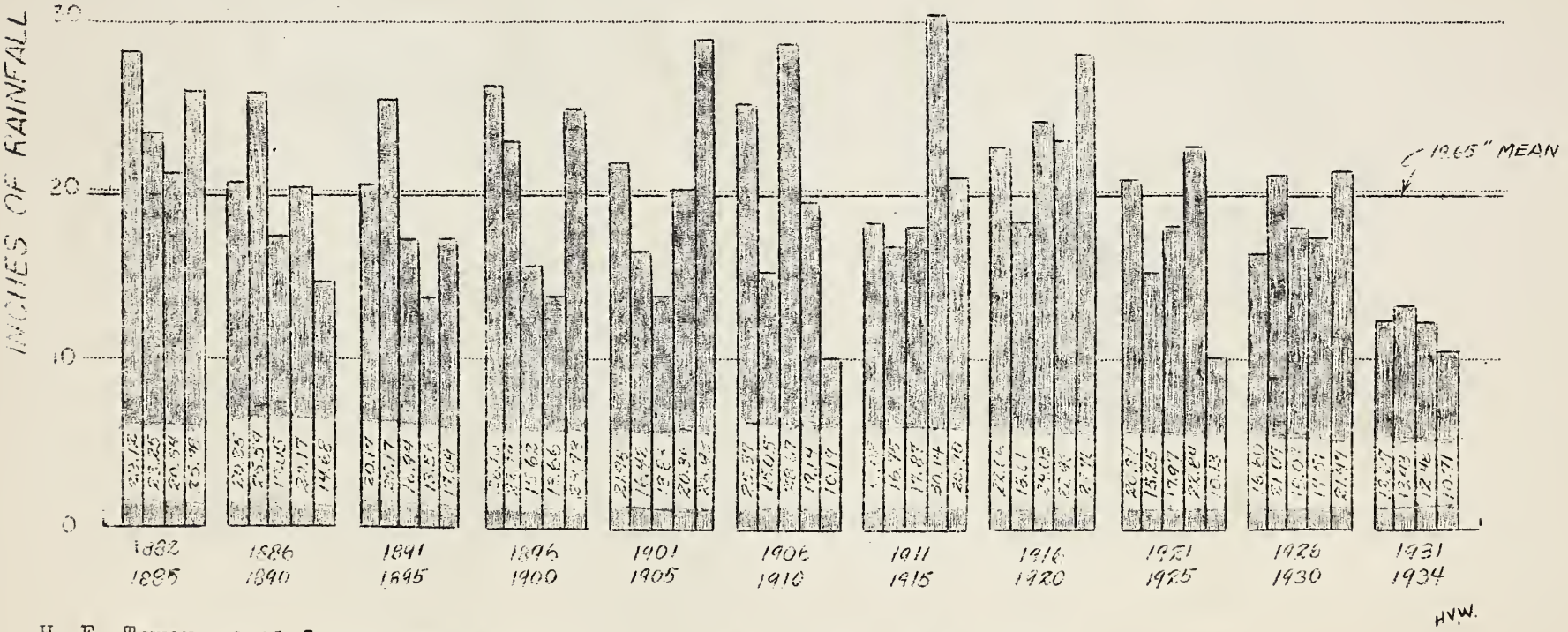


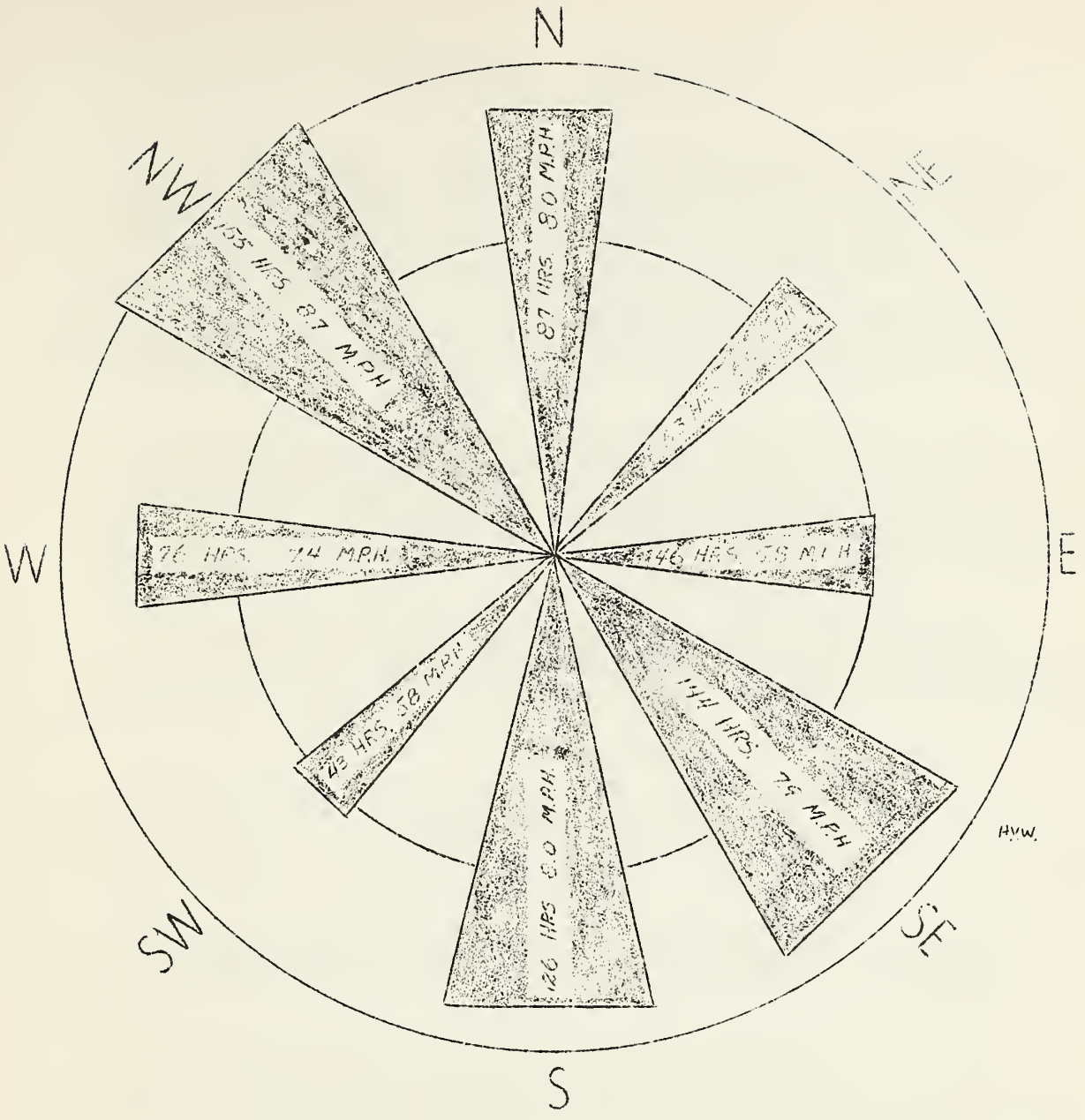
FIG. 3.

ANNUAL RAINFALL IN INCHES
HURON, S. DAK.
1882 TO 1934

NOTE: "RAINFALL" INCLUDES ALL MOISTURE - RAIN AND MELTED SNOW



H. E. Tower - Soil Conservation Service, U. S. D. A., Huron, South Dakota



WIND DIRECTIONS AND VELOCITIES AT HURON S. DAK. 1918-1930 INCLUSIVE

Chart No. 1 - Diagram Showing Relative Velocity and Direction of Wind at Huron, South Dakota, 12 year average.

Hours - Average number of hours per month.
M. P. H. - Average miles per hour.

P. Emerson
H. Tower

Soil Conservation Service, U. S. D. A. Huron, South Dakota.

GOOD NEWS

Cooperators, actual and prospective, will be delighted to know that field work has been resumed in the Beadle County areas. Tractors and blades are again at work leveling fence drifts and hummocks in fields. Where necessary, deep listing will follow the leveling to hold the soil in place until a crop cover can be established.

It is believed that 5,000 bushels of winter rye will soon be available for seeding as a winter cover crop on cooperator's farms where soils have been blowing.

All land owners in the project area who have drifting soils and who have not as yet become cooperators in the soil conservation program are advised to make contact with the conservation office as soon as possible as the season during which effective field work can be done is limited. Drifting soils which are left exposed during the coming winter will suffer greatly.

The unavoidable delays in carrying out the soil conservation program now seem to be at an end and every effort possible will be made to advance the work before winter comes.

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COVER CROPS

Cooperators with the Conservation Service and others planning to sow winter rye will do well to get the seed into the ground as soon as possible.

Rye makes an excellent winter cover to prevent soil blowing and provides good pasture. In some cases, particularly on blowing land, rye will be seeded with oats. The oats will grow more rapidly and furnish quick cover. The rye will come on more slowly. The oats will freeze down and the rye will continue through the winter and spring.

Tests will be carried out this fall with a new type of deep furrow drill sowing winter wheat. Winter wheat for cover and a cash crop would be ideal if the winter wheat line could be moved north far enough to include this area. If the deep furrow drilling will do this, it will be of great value in soil erosion control. However, not too much should be expected of winter wheat as a cover crop until more definite information is available.

E. H. Aicher,
Chief Agronomist.

NOTES AND COMMENTS

Of Interest To All Of Us

"A Market Report that is timely and unpredjudiced, such as your market service, will become increasingly valuable as the farmers have more and more to sell." This remark was made as we were discussing crop plans for 1936. It is typical of the manner in which our cooperators are appreciating the weekly market reports which are sent out by County Agent Hill collaborating with our Soil Conservationist in Farm Management. (Reported by O. Leon Anderson, Assistant Agronomist.)

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After the plan had been worked out with Mr. R. D. Hoskins of Wolsey, South Dakota, for his farm, he made the following statement:

"It appears that if anyone is interested in building up his land and preventing erosion, he would do just what we have planned to do whether the Soil Conservation Service furnished the seed or not."

Several other cooperators have recognized this after the plans of the program have been presented to them. Contact men treat each farm as a different problem and plan it to the mutual benefit and with the full agreement of the owner and tenant. (Reported by H. Leo Wilson, Junior Agronomist.)

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"Wherever possible," says E. H. Aicher, Chief Agronomist, on the Soil Conservation Project, located in Beadle County, "Russian Thistles should be mowed as soon as practicable. The mower should be adjusted to cut the thistles about eight inches above the ground.

"Where the thistles are mowed, they will not break loose from the soil and become tumble weeds leaving the soil bare, destroying fences, and causing soil drifts. The stubble, as well as much of the mown material, will remain to hold the soil in place and later, when plowed under, will add to the organic matter supply in the soil."

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Don't forget the Soil Conservation Exhibit at the State Fair September 9th to the 13th. Here you may see a model of an actual farm in the Erosion Control area as it was before the control work began and as it is after the program has been undertaken. It is worth a trip to the Fair just to see this one exhibit.

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All sweet clover and alfalfa plants so far examined in the project area seem to be naturally inoculated, that is, they bear nodules which are produced by the legume bacteria living with the plants. These bacteria are able to take nitrogen from the air and combine it in such a way that other plants can use it. Nature will help us if we only do our part.

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V I S I T O R S

Dr. F. J. Alway, Professor of Soils, University of Minnesota, visited the project area on Tuesday, August 20th, to observe the effects of wind erosion and the methods being used in its control.

J. G. Lindley, head of the E. C. W. Division of the Soil Conservation Service, accompanied by L. C. Tschudy, Chief Engineer, recently inspected the S. C. S. Camps engaged in the construction of water conservation dams at Chamberlain and Presho. He approved the projects and said that he would do all in his power to speed up the purchase of equipment at the earliest possible date.

I. K. Landon, Senior Soil Conservationist, Wilkie Collins, Associate Agronomist, and J. S. Barnes, Field Inspector, all of the Washington office were recent visitors consulting with Regional Director Clemmer and other members of the staff concerning problems involved in the organization and development of the general soil conservation program.

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H. M. Jones, State 4-H Club Leader for South Dakota was a caller Wednesday, August 21st. He said "Seek ye first the conservation of the soil and all other earthly good things will be yours."

With this thought in the minds of the men and women of the coming generation, the conservation of our soils and the prosperity of our state are assured.

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A. L. Ford, Director of the Shelterbelt project for South Dakota, was a recent visitor.

Frank Hayes and B. H. Williams of the Federal Soil Survey, working in cooperation with the Shelterbelt staff, spent an hour or two in the office discussing soil problems as related to tree plantings.

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A party of aerial photographers recently made photographs of the entire Soil Conservation area from an altitude of about 15,000 feet. These photographs when assembled will give a very clear picture of conditions in the area. If such a picture could have been made last year, it would have been possible to observe accurately the changes that have occurred since then. The photographs will be used in map construction and field studies.

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Notwithstanding the fact that this is the busy season on farms of the area, there have been many cooperators and other farmers who have visited the Conservation Office to discuss farm problems. Visitors are always welcome and there will always be someone available to serve you. Our time is your time, so come in whenever you feel like it.

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NEWS FROM THE CONSERVATION CAMPS

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S. C. S. CAMP NO. 2, PRESHO, S. D.

Camp SCS No. 2, located at Presho, has under construction two large earthen dams for water conservation. These dams were started by the Forest Service last year, but have been turned over to the Soil Conservation Service for completion.

At present, all work is concentrated on the Hussman Dam located five miles south and east of Presho. This dam is 1500 feet long from Primary to Secondary spillways. The maximum height is 30 feet, with a 24 foot top. The base will be approximately 200 feet wide at the center of the dam where the fill is greatest. The back side of the dam has a 2 : 1 slope with a six foot barm 15 feet from the top. The face of the dam has a 3: 1 slope to a point 14 feet from the top where there is a six foot barm, then the slope is 4: 1 to the natural ground level.

A core wall has been completed along the face of the dam. The trench was made ten feet wide and carried into an impervious stratum of shale. In carrying on the filling operations of the core wall, the material was deposited in four inch layers and thoroughly hand tamped or rolled. Each layer was moistened to such a degree that when the material was rolled or tamped, the new material was bonded firmly with the previous layer.

The material used in this project is composed mostly of gumbo which proves very satisfactory for earthen dam construction. It is carefully selected and free from vegetation and shale.

The embankment fill is deposited in six inch layers. The finest material is deposited in the upstream one-third of the dam and the coarsest in the downstream side. Each layer is thoroughly pulverized, rolled and wet before the next layer is placed. This method of placing the layers insures a dense and impervious fill.

The flood waters will be carried off by two spillways. The primary spillway is approximately 650 feet long and 35 feet wide, Progress on the primary spillway has been checked considerably by an unexpected stratum of shale. A concrete overfall will be constructed in the very near future.

The secondary spillway is 900 feet long and 100 feet wide. The water will flow through this spillway only on rare occasions, and is an added safety factor to discharge the surplus water when the primary spillway has reached its capacity. The drainage area is 7000 acres and the impounded area of this dam will be 137 acres. There will be approximately 1115 acre feet of water of 359,000,000 gallons when the dam is filled to the normal elevation.

Equipment now being used in the construction of the Hussman Dam has been obtained from various sources. Lyman County is furnishing a 60 H. P. Caterpillar tractor, a 10 ton Holt tractor, a 42 inch Russell excavator, a 12 foot Russell blade, a 33 cubic foot rotary fresno, a six ton roller, and six 4 horse fresnoes. An eight foot blade is being furnished by Earling township.

Government equipment includes two 35 H. P. Cletrac tractors, four Chevrolet dump trucks, five Dodge and Chevrolet stake trucks, and a Ford Model A.Pickup. Besides this, a sixty cubic foot rotary fresno, and one Novo Centrifugal pump has been rented.

Horses were used in the construction of the dam pending the arrival of ten new Dodge dump trucks. The horses were used mainly on dump wagons, and on fresno work in the primary spillway. Dump wagons, harness and feed supply of the horses were furnished by the horse contractor.

Water for sprinkling the embankment fill is pumped from a water hole in front of the dam. A centrifugal pump equipped with a long hose is being used for this purpose. Sections of the dam which cannot be reached by this hose are sprinkled by two stake trucks fitted with water tanks. For the past two weeks, lack of sufficient rainfall has made it necessary to haul water several miles from an Artesian well in the vicinity of Presho. Trucks equipped with tanks are used for this purpose.

Work has been slowed at times by an insufficient number of men for hand labor. The Company Strength at July 1 was approximately 200 men. It has steadily fallen until at the present date it is only 150. Of these, only 121 are available for work under the SCS. This is due to the fact that 24 are carried on the Army Overhead, and the remaining men not on duty because of leave of absence or sickness.

A double shift has been used to enable the utilization of equipment to a better advantage. Under this plan, the machinery is used effectively more hours each day than would otherwise be possible.

Approximately 1200 cubic yards of earth are being moved daily with the present equipment. With the ten new dump trucks which have just arrived, as much as 2000 cubic yards may be moved daily.

The earth fill of this project will be completed about September 15 and then the heavy equipment will be moved to the Nail Creek project.

The present plan is to place the rip-rap on the dams during the winter months when earth work is not possible. A rock toe for drainage purposes is to be placed on the back side of the Hussman Dam.

If good weather prevails, the bulk of the work on these projects should be completed before the spring rains.

Don Williams, Camp Superintendent,
Presho, South Dakota.

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S. C. S. CAMP NO. 4, PARK RIVER, N. D.

SCS - 4 located at Park River, North Dakota, is now completing the construction of three out of seven dams started so far this season. Two of these are of the earth-fill with rubble-masonry type dam.

The rubble-masonry dam is located three miles south of Hoople on the Middle Branch of the Park River. The dam is eight and one-half feet high, and backs water nearly three and one-half miles to directly benefit five dams through which the river flows.

One earth-fill dam is nearing completion three miles north of Hoople on Cart Creek. It is one of the smallest dams built by the camp this year. It stands eleven feet high and 125 feet long. Some work on the rubble-masonry spillway located at the west end of the dam is all that is needed to bring the dam to completion. Although a small dam, it will back water on three different farms.

The third dam is located approximately eight miles southwest of Adams. Two hundred feet long and ten feet high this dam is welcomed by the farmers in that vicinity who last year were compelled to haul water some distance.

All of these dams are situated only a short distance from state highways, and will, no doubt, be favorite spots for picnickers and people seeking diversion from the days work in the form of swimming, boating, and hunting. As has been shown by the dams built last year, these sites are the center of attraction for most of the people in their vicinity, and are, therefore, of some social value in bringing the neighbors in closer contact with each other.

The largest dam under construction in this camp is the Dougherty Dam, located about five miles southeast of Adams. It is twenty-one feet high and 275 feet long with nearly eight thousand cubic yards of fill. The dam is being built in a large coulee which forms a branch of Forest River, and when completed will form a small lake by holding the waters which would otherwise flow swiftly down the stream. The reservoir should make a favorite spot for sportsmen, as the large body of water with its uncultivated shores will be an invitation to ducks and other wild fowl to nest there.

The fifth dam under construction by the main camp is being built in the town park at Hoople on the North Branch of the Park River. It is a small rubble-masonry dam, and its construction is being watched with interest by the residents of that town, especially the youngsters who are looking forward to a good swimming pool next summer.

The sub-camp at Cavalier is showing good progress on the construction of two dams there, one a rubble-masonry dam at the Tongue River, three miles north and three miles west of Pembina, and the other a small earth dam just north of Cavalier.

Roy J. Gardner, Camp Superintendent,
Park River, N. Dak.

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S. C. S. CAMP NO. 6, LAKOTA, N. D.

Company 2760 with a present strength of 180 enrolled men is holding its own during what is usually known as the busy season, harvest and threshing. Earlier in the season, with a great demand for harvest hands in view to care for prospective large crop, it was the plan of a number of the enrolled men to secure discharges and return to their home vicinities to aid in the harvest fields. When prospects for a large crop no longer existed the old saying "better be safe than sorry" reminded the members of the Civilian Conservation Corps that they will need a place to eat and sleep after "the works all done this fall" and consequently they are staying with us helping to conserve our future supply of moisture.

1935 with its abundance of rain, has brought problems for the personnel of the Emergency Conservation Work to solve which, in most localities in North Dakota, did not exist in the two years previous of building dams. These problems have added to the many phases of the work, and in like manner have added to the interest that is being taken in planning new methods and putting them into practice. In many cases sites for dams, which were surveyed earlier in the year and which for the past several years have been dry during the summer months have had a constant flow of water since the beginning of the spring run off.

Wet weather conditions have determined Saturday almost to be one of the regular working days for the Lakota Camp. Out of eleven weeks worked since the Company returned to the State seven Saturdays have been worked making up time lost during the regular working days because of rain.

Out of the seven projects worked from the Lakota Camp this year, three have been completed and the others are well under way. Storage capacity for approximately 1100 acre feet of water will result from these projects.

Baseball is and has been the chief recreation of the season. Of the 14 games played, to date, 10 were won by the Lakota Camp team over neighboring C.C.C. Camp and city teams. The team will be out for victory on August 31st, at Bismarck where the State C.C.C. tournament is scheduled to take place.

Niel MacDougall, Camp Superintendent,
Lakota, N. Dakota.

THE WORN OUT FARM

Encompassed by a wilderness of briar and thorn,
Its garden over-run by noisome weeds,
The home round which glad children played
Stands all a-wreck and Ruin claims it for his own.

The toppling chimney tells of home-fires dead,
The shattered pane, of light that failed;
The unhinged door unto the broken hearthstone
Now admits the ghosts of those forever gone.

Of cruel tradedy the ruin speaks,
Of blighted hopes, of unrequited toil;
And he who for the cause of reason seeks
Needs but to ask the worn out barren soil.

The fields, once fruitful and benign,
Sparse weeds now yield where once grew golden grain;
Their guttered furrows of old age - the sign
That points where all their youth and strength have gone.

"Man marks the earth with ruin", sang the bard,
A ruin that engulfs him and his own;
Escape it yet he may by striving hard,
With knowledge as the saving power alone.

Oh, foolish man of high or low estate,
Through ignorance or lack of vision clear
Destroying his most precious heritage,
Destroying his Hereafter and his Here!

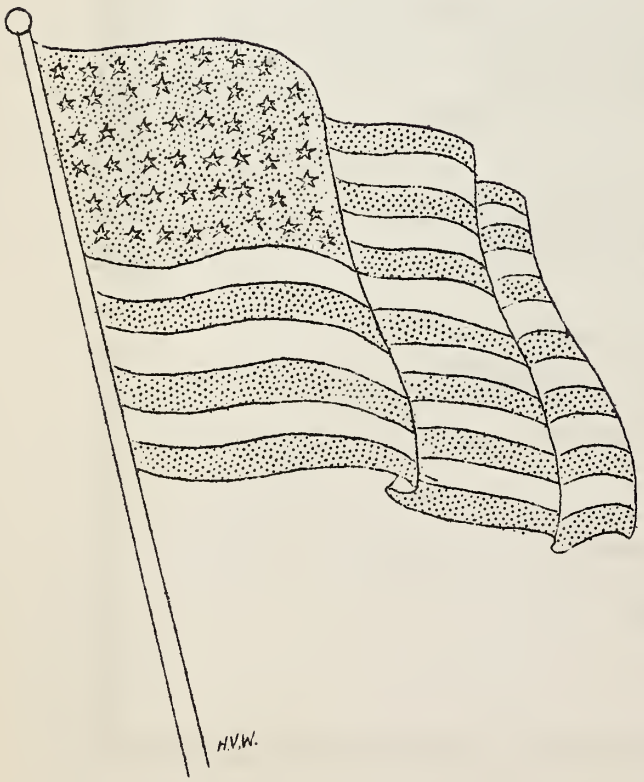
Up, valiant souls who know the race's need,
Proclaim the truth and faint not while you toil;
Write plain the words where all who run may read:
The Nation's life-blood springs from out the soil.

J. G. Hutton

1930

UNITED STATES
Department of Agriculture
Soil Conservation Service
Huron, S. D.

Official Business



THE SOUL OF CONSERVATION

O Country mine!
With far-flung pastures,
Fields, and orchard-lands;
With forests ever green
Or painting Indian Summer's glory;
With feathered singers, bold or shy,
And feathered air-fleets winging high
To tell the changing season's story;
With rolling rivers, springs,
And singing brooks;
With wild flowers bright'ning
Woodlands, fields, and nooks:
To you I pledge allegiance
That our flag may always wave
Over fruitful land,
Good, fair women
And good, brave men;
To you I pledge my heart and hand
To help to foster and to save
The precious gifts
That Mother Nature gave
Our nation.

J. G. Hutton
August 16, 1935.